Sci**Score**Report Summary

Your Score

10

99.2-th percentile
Of all PMC papers
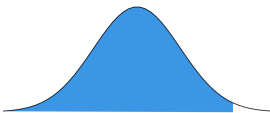
Ethics **5 of 5** (scored together with rigor)
We detected that your paper uses animals. Each manuscript should address the <u>ARRIVE</u> guidelines.

	Identified Explanation		Not Identified Explanation		Not applicable Explanation

⬜	Institutional Review Board Statement (IRB)	🟦	Field Sample Permit
⬜	Consent Statement	🟦	Euthanasia
🟦	Institutional Animal Care and Use Committee Statement (IACUC)		

Rigor Adherence

	Identified Explanation		Not Identified Explanation		Not applicable Explanation

🟦	Inclusion and exclusion criteria	🟦	Replication
🟦	Attrition	🟦	Cell line authentication
🟦	Sex as a biological variable	🟦	Code information*
🟦	Subject demographics	🟦	Data information*
🟦	Randomizations	🟦	Protocol information*
🟦	Blinding	🟦	Statistics*
🟦	Power Analysis		

Key Resources Adherence **5 of 5**

	Identified RRID, catalog number		Suggestable Catalog number, full name		Not Identified Nickname		Not detected

Antibodies	🟦	1
Cell Lines	🟦	1
Oligonucleotides*	⬜	
Organisms	🟦	3
Plasmids	🟦	1
Software tools	🟦	3

*not scored but important!

How is the score calculated?
The score is the sum of rigor and ethics values (5 of 10) and the resource values (5 of 10) and rounding (<u>details</u>).

How does my score compare?
The percentiles are calculated from the sciscore analysis for nearly 2mln PMC papers (<u>Menke et al, 2022</u>).

How can I improve my score?
For detailed advice please check the column "how to improve my score" in the full report. For general information please check the <u>FAQ</u>.

More questions?
Please check our tool <u>FAQ</u>.

If SciScore makes any mistakes please <u>contact us</u> to help us learn and improve.

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Document Identifier: **109834**

SciScore Report

Below you will find your SciScore report containing three tables. Your score is calculated based on adherence to scientific rigor criteria (Table 1) and identification of key biological resources (Table 2). Table 3 contains statistical tests and oligonucleotides but is not scored. If SciScore makes any mistakes, please contact us to help us learn and improve.

Table 1: Rigor Adherence Table

Detected Sentence	How to improve paper?
Ethics	
IACUC: The Ohio State University Institutional Animal Care and Use Committee (IACUC) specifically approved this study (1).	☑
Field Sample Permit: Permission to conduct field surveys on each location was given by the individual landowners concerned, and by the regulatory authority (Natural England) in those situations where the field site was afforded protected status (i.e. Site of Special Scientific Interest) (4).	
Euthanasia Agents: Mice were deeply anesthetized by intraperitoneal injection of sodium thiopental before decapitation, followed by brain extraction (Agent - 5B).	
Inclusion and Exclusion Criteria	
Women were eligible for the cross-sectional study if they were fluent in English and had a female sexual partner (FSP) in the previous 18 months and ineligible if they were pregnant, post-menopausal or had undergone a sex change (6).	☑
Attrition	
Of these, 21 ticks could not be removed from the birds and 162 ticks were lost due to technical problems during nucleic acid extraction, resulting in 1,150 ticks available for analysis (7).	☑
Sex as a biological variable	
Women were eligible for the cross-sectional study if they were fluent in English and had a female sexual partner (FSP) in the previous 18 months and ineligible if they were pregnant, post-menopausal or had undergone a sex change (6).	☑
Subject Demographics	
Age: Their age varied from 19 to 47 years (mean 26.3 , ssd 6.4) and length of relationship from 4 months to 23 years (mean 3.7, ssd 4.4) (9).	☑
Weight: Rats, weighing 200 ± 20 g at the beginning of the experiment, were housed in a room maintained at 23°C with a 12-hour light-dark cycle (10).	
Randomization	
Enrolled subjects on continuous suppressive ART were randomized to receive either mesalamine or matching placebo for 12 weeks, followed by a 12 week crossover period on the alternative arm (11).	☑
Blinding	

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Subjects, coordinators, clinicians, and laboratory personnel were blinded to treatment assignment (12).	✅	
Power Analysis		
To determine the sample size of animal experiments, we used power analysis assuming the (difference in means)/(standard deviation) is >2.5 (13).	✅	
Replication		
Bioassays were replicated three times (15).	✅	
Number: Bioassays were replicated three times (15).		
Cell Line Authentication		
Authentication: All cells were authenticated by STR profiling and flow cytometry (16).	✅	
Contamination: All cell lines were obtained from ATCC and tested negative for mycoplasma contamination (17).		
Code Information		
Availability: The detailed protocol is available online at dx.doi.org/10.17504/ protocols.io.bhtaj6ie (25).		If you have used code in your study please add a link to a persistent identifier (DOI) of your code, or a link to github or another code repository. See more
Identifiers: The scripts used are available online (https:// github.com/JuliusRonkko/Ca2-analysis) (27).	https://github.com/ JuliusRonkko/Ca2-analysis	If you have used code in your study please add a link to a persistent identifier (DOI) of your code, or a link to github or another code repository. See more
Data Information		
Availability: Expression data for the I-BET151 comparison were downloaded from ArrayExpress (RRID:SCR_002964, accession:E-MTAB-774) and processed files used as is.		If you have deposited data or used data in your study, please share the persistent identifier for this dataset, e.g., GSE235594, DOI: 10.26275/gfwu-pi0p. See more
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Protocol Information		
Identifiers: The detailed protocol is available online at dx.doi.org/10.17504/protocols.io.bhtaj6ie (25).	dx.doi.org/10.17504/ protocols.io.bhtaj6ie	✅

Table 2: Key Resources Table

Detected sentence	Reagent or Resource Name	Identifiers	How to improve paper
Antibodies			
Immunohistochemical staining for BrdU was then performed using an anti-BrdU antibody (RRID:AB_10763546) (18).	anti-BrdU	(Antibodies-Online Cat# ABIN336862, RRID:AB_10763546)(link)	✅
Experimental Models: Cell Lines			
For the primary and secondary screenings, we used a subclone (A23) of HEK293 (ATCC CRL-1573, RRID:CVCL_0045).	HEK293	(Abcam Cat# ab277915, RRID:CVCL_0045)(link)	✅
Experimental Models: Organisms/Strains			
To generate PIP821bpΔ we cloned pU6-2-BbsI-gRNA (DGRC #1363) and then subsequently injected into w1118; vas-Cas9 (RRID:BDSC_51324, Rainbow Transgenics) (Fly - 19).	w1118; vas-Cas9	RRID:BDSC_51324(link)	✅
The following animals were used: female C57BL/6nTac (RRID:IMSR_TAC:b6), and SJL/J (RRID:IMSR_JAX:000686) (Mice - 19).	C57BL/6nTac	RRID:IMSR_TAC:B6(link)	
	SJL/J	RRID:IMSR_JAX:000686(link)	✅
Recombinant DNA			
The constructions were prepared using a vector which was a gift from Feng Zhang (Addgene plasmid #62988; RRID: Addgene_62988).		RRID:Addgene_62988(link)	✅
Software and Algorithms			
Animal tracking is implemented as a part of ImageJ (RRID:SCR_003070).	ImageJ	ImageJ (RRID:SCR_003070)(link)	✅
Expression data for the I-BET151 comparison were downloaded from ArrayExpress (RRID:SCR_002964, accession:E-MTAB-774) and processed files used as is.	ArrayExpress	ArrayExpress (RRID:SCR_002964)(link)	✅
Statistical analysis GraphPad (RRID:SCR_002798) was used for statistical analysis.	GraphPad	GraphPad Prism (RRID:SCR_002798)(link)	✅

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Table 3 Statistics

SciScore is a software tool, if you need a statistics consult please see your local, friendly math department, inquire about the "statistician on call", they are there to help.

Your Sentences	Recognized Entity	How to improve paper?
Statistical Tests		
Normally distributed data were analyzed using unpaired two-sided t-tests (two groups), ordinary one-way ANOVA with Tukey post hoc analysis for multiple comparisons (≥3 groups), or ordinary two-way ANOVA and Tukey post hoc for multiple comparisons (two variables) and is shown as mean ± sem (23).	t-tests	T-tests should be associated with info about: Design (methods section, please include) • one or two group test • for two groups: paired or unpaired • tails: one or two tails • statistical package or program used (RRID) Assumptions (methods section) • normal distribution of data in the underlying population • equal variances of group samples • independence/dependence for unpaired/ paired test Statistics (results section) • t-statistics, exact p-value, degrees of freedom, number of observations per group • effect size with confidence intervals • descriptive statistics [More information and examples](#)
	ANOVA	ANOVA test should be associated with info about: Design (methods section, please include) • number of factors included in ANOVA (one way ANOVA, two-way ANOVA, or more factors ANOVA) • for each factor: name and levels of the factor and the statement whether the factor was within-subjects factor or between subjects factor, information on blocking • if the ANOVA has two or more factors, information whether the interaction term was included • post hoc test used • statistical package or program used (RRID) Assumptions (methods or results section) • normal distribution of data in the underlying population • equal variances of group samples Statistics (results section) • F-statistic, degrees of freedom, exact p-value for each factor or interaction • descriptive statistics • results for post hoc test [More information and examples](#)

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Normally distributed data were analyzed using unpaired two-sided t-tests (two groups), ordinary one-way ANOVA with Tukey post hoc analysis for multiple comparisons (≥3 groups), or ordinary two-way ANOVA and Tukey post hoc for multiple comparisons (two variables) and is shown as mean ± sem (23).	Tukey post hoc	
		Thank you for reporting use of post hoc test. [More information and examples](#)

SciScore is an <u>automated tool</u> that is designed to assist expert reviewers by finding and presenting formulaic information scattered throughout a paper in a standard, easy to digest format. ***SciScore is not a substitute for expert review.*** SciScore also checks for the presence and correctness of several unique identifiers, including RRIDs (research resource identifiers) in the manuscript, detects sentences that appear to be missing RRIDs, and can even suggest RRIDs under certain circumstances. **All RRID suggestions should be verified;** only the author can know whether the suggestions are correct.

For a full description of scored criteria and tips for improving your score, please see https://www.scicrunch.com/sciscorereport-faq